

WHAT IS CLAIMED IS:

1. A catheter comprising:  
a first shaft having a proximal portion, a distal portion, and a first lumen;  
a second shaft having a second lumen for a guidewire, said second shaft including a sectional portion comprised of a plurality of guidewire clips for holding the guidewire along the first shaft, wherein each of the guidewire clips is separated from an adjacent guidewire clip such that a clinician has access to the guidewire there between.
2. The catheter according to claim 1, wherein the plurality of clips includes a proximal clip, a distal clip and at least one intermediate clip disposed between the proximal and distal clips.
3. The catheter according to claim 2, wherein the at least one intermediate clip has an outer surface and a slit extending from the outer surface to the lumen thereof, such that the guidewire can be transversely loaded or unloaded through the slit.
4. The catheter according to claim 2, wherein there are at least two intermediate clips disposed between the proximal and distal clips
5. The catheter according to claim 1, wherein the catheter is used for angioplasty and said sectional portion of said second shaft is disposed along the proximal portion of said first shaft.
6. The catheter according to claim 1, wherein the catheter is an aspiration catheter and said sectional portion of said second shaft is disposed along the distal portion of said first shaft.

7. A balloon catheter comprising:
  - an inflation shaft having a proximal portion, a distal portion, and an inflation lumen;
  - a guidewire shaft having a guidewire lumen, wherein said guidewire shaft includes a proximal portion comprised of a plurality of clips wherein at least one of the clips is spaced from each adjacent clip in such a manner as to allow access to a guidewire proximally and distally thereof; and
  - a balloon disposed on the distal portion of the inflation shaft, wherein an interior of the balloon is in fluid communication with the inflation lumen.
8. The balloon catheter according to claim 7, wherein the plurality of clips includes a proximal clip, a distal clip and at least two intermediate clips disposed between the proximal and distal clips.
9. The catheter according to claim 8, wherein at least one of the intermediate clips has an outer surface and a slit extending from the outer surface to the guidewire lumen thereof, such that a guidewire can be transversely loaded or unloaded through the slit.
10. A stent delivery system comprising:
  - a balloon catheter, the balloon catheter including,
    - an inflation shaft having a proximal portion, a distal portion, and an inflation lumen;
    - a guidewire shaft having a guidewire lumen, a proximal sectional portion and a distal portion, wherein the proximal sectional portion of said guidewire shaft is further comprised of a plurality of short segments positioned along the proximal portion of said inflation shaft and the distal portion of said guidewire shaft is disposed within the distal portion of said inflation shaft; and
    - a balloon disposed on and in fluid communication with the distal portion of said inflation shaft; and

a stent mounted on said balloon.

11. The stent delivery system according to claim 10, wherein the plurality of short segments of the proximal sectional portion of said guidewire shaft includes a proximal segment, a distal segment and at least one intermediate segment disposed between the proximal and distal segments.

12. The stent delivery system according to claim 11, wherein the at least one intermediate segment includes a slit for ease of transversely loading and unloading a guidewire into and out of the guidewire lumen.

13. The stent delivery system according to claim 11, wherein the at least one intermediate segment is positioned between and separated from each of the proximal or distal segments such the guidewire is accessible proximally and distally of the intermediate segment.

14. An aspiration catheter comprising:

an aspiration shaft having a proximal portion, a distal portion, and an aspiration lumen; and

a guidewire shaft having a guidewire lumen, wherein said guidewire shaft is comprised of a sectional portion that includes a plurality of clips wherein at least one of the clips is spaced from each adjacent clip in such a manner as to allow access to a guidewire proximally and distally thereof, and wherein the sectional portion of said guidewire shaft is positioned along the distal portion of said aspiration shaft.

15. The balloon catheter according to claim 14, wherein the plurality of clips includes a proximal clip, a distal clip and at least two intermediate clips disposed between the proximal and distal clips.

16. The catheter according to claim 15, wherein at least one of the intermediate clips has an outer surface and a slit extending from the outer surface to the guidewire lumen thereof, such that a guidewire can be transversely loaded or unloaded through the slit.